

## MANUFACTURE OF LAMINATING MATERIAL

Patent Number: JP57193362

Publication date: 1982-11-27

Inventor(s): TOUTO TADASHI;; TAKAHASHI TOORU;; ISHIDA TOSHIO;; YOSHIDA TAROU

Applicant(s): FUJIMORI KOGYO CO

Requested Patent: ☐ JP57193362

Application Number: JP19810078608 19810526

Priority Number(s): JP19810078608 19810526

IPC Classification: B32B31/00; B32B31/28

EC Classification:

EC Classification:

Equivalents: JP1405165C, JP62013900B

---

### Abstract

---

---

Data supplied from the esp@cenet database - I2

Bild nicht gespeichert

上記表から明らかなように、電子線照射を行なった本発明に係る積層材料はレトルト処理に充分耐え得るものであるのに対し、電子線照射を行っていない比較品はレトルト処理により接着強度が極度に低下し、更にデラミネーションを起しており使用に耐え得ないものであつた。

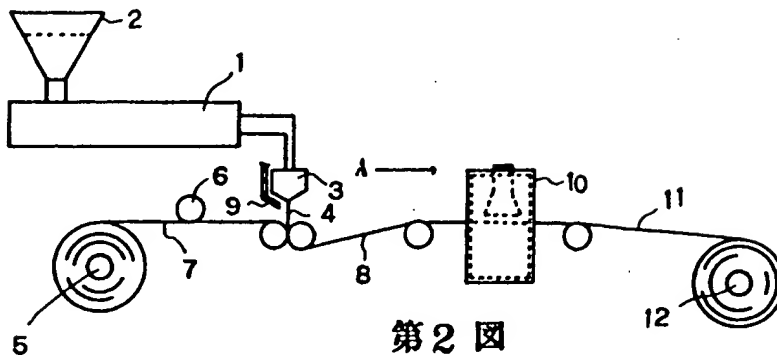
#### 4. 図面の簡単な説明

第1図は本発明の実施に使用する積層材料の製造装置の一例を示す概略側面図、第2図は同装置を用いて製造した積層フィルムの一例を示す拡大側面図である。

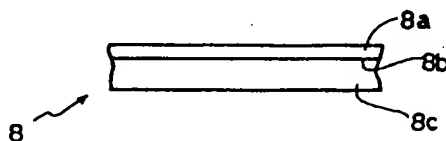
- 1・・・押し輦、 3・・・Tダイ、 4・・・押しフィルム、  
 7・・・基材、 8・・・積層フィルム、  
 9・・・オゾン供給ノズル、 10・・・放射線照射装置、  
 11・・・積層材料

出願人 藤森工業株式会社  
 代理人 弁護士 高 畑 靖 世  
 〃 弁護士 小 島 隆 司

第1図



第2図



AN 1983:180706 HCAPLUS  
 DN 98:180706  
 TI Heat-resistant laminated packaging films  
 PA Fujimori Industry Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC B32B-031/00; B32B-031/28  
 CC 38-3 (Plastics Fabrication and Uses)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP--57193362	A2	19821127	1981JP-0078608	19810526
	JP--62013900	B4	19870330		
AB	The title films avoid the expense and toxicity problems of dry-laminated films using solvent-based adhesives, and also have better heat resistance than conventional extrusion-laminated films. They are manufactured by extruding a thermoplastic film layer onto a base film in the presence of ozone, then treating the resulting laminate with ionizing radiation. Thus, medium-d. polyethylene [9002-88-4] was melt extruded at 280° to form a film, 60-μ thick, which was pressed under O3 against a 15-μ polyamide film coated with 0.1 g/m2 of an isocyanate coupling agent, then irradiated with 3 Mrad from a 300-kV electron beam. Bags made from the resulting laminate were filled with meat sauce, heat sealed, and autoclaved at 115°. After 30 min they showed no visible delamination and still had satisfactory adhesion, in contrast to bags made identically but without electron beam irradiation				
ST	extrusion laminated sterilizable packaging film; ozone treated irradiated film laminate; radiochem adhesion enhancement thermoplastic laminate				
IT	Radiation, chemical and physical effects (adhesion enhancement by, in ozone-treated plastic film laminates)				
IT	Plastics, laminated RL: TEM (Technical or engineered material use); USES (Uses) (extrusion-, ozone treated and irradiated for heat resistance)				
IT	Heat-resistant materials (extrusion-laminated packaging films, ozone-treated and irradiated, sterilizable)				
IT	Metals, uses and miscellaneous Polyamides, uses and miscellaneous Polyesters, uses and miscellaneous RL: TEM (Technical or engineered material use); USES (Uses) (films, laminates with extruded thermoplastic layers, ozone-treated and irradiated)				
IT	Adhesion (promoters, ozone, for extrusion-laminated irradiated packaging films)				
IT	Packaging materials (films, extrusion-laminated, ozone-treated and irradiated, sterilizable)				
IT	10028-15-6, uses and miscellaneous RL: TEM (Technical or engineered material use); USES (Uses) (adhesion promoters, for extrusion-laminated packaging films)				
IT	9002-88-4 9003-07-0 RL: TEM (Technical or engineered material use); USES (Uses) (extruded films, laminates, ozone-treated and irradiated for heat resistance)				
IT	25038-59-9, uses and miscellaneous RL: TEM (Technical or engineered material use); USES (Uses)				